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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,538	01/11/2001	Hans Heinle	1-22914	9389

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EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 08/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,538

Applicant(s)

HEINLE ET AL.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the phrase "Fig. 1 is to be published with the abstract." should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 12. The phrase " a primary cooling circuit (3) including a primary cooler (4), a primary temperature sensor (23), at least two secondary cooling circuits (5,6)..." in lines 2-4 is indefinite. It is unclear to the Examiner which elements listed after the word "includes" are encompassed in the primary cooling circuit (3).

Re: claim 12. Claim 12 recites the limitation "the filling" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim.

Re: claim 12. The phrase "viscous fluid" in line 10 is indefinite. It is unclear to the Examiner whether the viscous fluid claimed in line 10 is different or the same as that claimed in lines 4-5.

Re: claim 12. Claim 12 recites the limitation "the cooling air" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Re: claim 12. Claim 12 recites the limitation "the main cooler" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5381761 to Tanaka in view of US Patent 6220416 to Katoh et al. and US Patent 5215044 to Banzhaf et al. Tanaka shows in figure 1 a drive 10 for cooling fans in motor vehicles, the drive comprising a primary cooling circuit including a primary cooler as disclosed in col. 3 lines 19-23, a primary temperature sensor 34, at least two secondary cooling circuits or the cooling water and the fins as disclosed in col. 5 lines 9-11 and col. 6 lines 28-30, a fluid friction clutch including driving and driven clutch members 25, 12 and a reservoir 23 for a viscous fluid the reservoir being limited by a separating means 21, 26 and being connectable to a working chamber 22 by at least one first opening 31 in the separating means, the working chamber extending into a region between the clutch members in which torque is transmitted from the driving clutch member to the driven clutch member by the viscous fluid, and wherein the filling of the chamber with viscous fluid is controlled by a first control element 32 opening and closing first opening in the separating means depending on the temperature of the cooling air passing through the main cooler sensed by the primary temperature sensor, characterized in

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that one of the at least two secondary cooling circuits includes a secondary temperature sensor 78, the secondary temperature sensor being operatively connected to a control unit 81,84 arranged to control a second control element 65 wherein the separating means comprises at least one second opening 61, the second control element being arranged in the working chamber, the control unit moving the second element to open and close the at least one second opening in accordance with the temperature sensed by one or more of the temperature sensors to control the filling of the chamber with viscous fluid, and wherein control of second opening is not influenced by the first control element, but does not disclose the limitation of the separating means specifically being a member or the limitation of each of the at least two secondary cooling circuits including a secondary temperature sensor operatively connected to the control unit.

Katoh et al. teach in figures 3 and 4 a drive for cooling fans in motor vehicles including the use of a separating means being a separating member 13 having a first opening 14 being opened and closed by a first control member 26a and a second opening 23 being opened and closed by a second control member 27,32. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the separating means of Tanaka to have included a separating member, as taught by Katoh et al. to provide the valve function of both the first control element and second control element on a single member allowing an efficient, more compact construction.

Although Tanaka discloses in col. 6 lines 28-30 that the temperature of the air passing through the fins (one of the secondary cooling circuits) rises which implicitly

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indicates the use of a temperature sensing means, the reference does not specifically disclose that the temperature sensing means or sensor is operatively connected to the control unit. Banzhaf et al. teach in lines 11-14 of the abstract the use of a cooling device including the use of at least two secondary control units (second and third) each including a secondary temperature sensor being operatively connected to a control unit as taught in lines 11-14 of the abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the other of the secondary cooling circuits of Tanaka to have included a secondary temperature sensor operatively connected to the control unit, as taught by Banzhaf et al., in order to provide a means of varying the flow of the medium through the individual cooling circuits depending on the measured temperature conditions to efficiently control the actuation of the drive of the cooling fan device as taught in col. 1 lines 16-18.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb 8/5/02
mmb
August 5, 2002

M. C. Graham
8/6/2002
MATTHEW C. GRAHAM
PRIMARY EXAMINER
GROUP 310